

2010

Buckle up safely for Indigenous children: development and evaluation of a preschool based education program to increase correct use of appropriate child restraints

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Recommended Citation

Hunter, K; Clapham, Kathleen; Lyford, M; Keay, L; Brown, J; Bilston, L; Fegan, M; and Ivers, Rebecca, "Buckle up safely for Indigenous children: development and evaluation of a preschool based education program to increase correct use of appropriate child restraints" (2010). *Australian Health Services Research Institute*. 310.
<https://ro.uow.edu.au/ahsri/310>

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Abstract

Background: Road traffic injuries are the leading cause of death and serious injury in Australian children and Indigenous children aged 0-4 years suffer 3.1 times more fatalities and 2.5 times more hospitalisations due to transport injuries than do non-Indigenous children. Parents are aware of the safety benefits of using car restraints for their children but are reportedly less aware of the appropriate restraint for their child's age.

Keywords

preschool, development, evaluation, buckle, children, restraints, indigenous, up, child, appropriate, increase, program, education, correct, safely

Publication Details

K. Hunter, K. F. Clapham, M. Lyford, L. Keay, J. Brown, L. Bilson, M. Fegan & R. Ivers, "Buckle up safely for Indigenous children: development and evaluation of a preschool based education program to increase correct use of appropriate child restraints", Australasian Road Safety Research, Policing and Education Conference: Canberra, 2010. Australian Health Services Research Institute, Australia, (2010)

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BUCKLE UP SAFELY FOR INDIGENOUS CHILDREN:

Development and evaluation of a preschool based education program to increase correct use of appropriate child restraints.

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Background

Road traffic injuries are the leading cause of death and serious injury in Australian children and Indigenous children aged 0-4 years suffer 3.1 times more fatalities and 2.5 times more hospitalisations due to transport injuries than do non-Indigenous children¹. Parents are aware of the safety benefits of using car restraints for their children but are reportedly less aware of the appropriate restraint for their child's age².

Appropriate restraint use

We know that:

- parents' knowledge of restraint transition is associated with appropriate restraint use³ and
- hands-on education significantly increases correct use of restraints⁴.

Aim

This controlled before and after study aims to:

1. To identify the **barriers** to correct use of appropriate child restraint use amongst regional Indigenous preschool children.
2. To develop and implement a **multi-faceted program** appropriate for regional preschools.
3. To increase the **correct use of appropriate child restraints** amongst Indigenous families in the Shoalhaven region of NSW.

Methods

Three preschools in the Shoalhaven region of NSW with a large proportion of Indigenous children will participate.

Focus groups will be conducted to explore the barriers and facilitating factors around restraint use. The key findings from the focus groups will inform the development and delivery of a multifaceted program appropriate for Indigenous families. **Figure 1 presents the core components of the program.**

At baseline and post-test parents will be asked questions around restraint use and readiness to use appropriate child restraints. Following the program, restraint use will be objectively assessed by trained researchers. A Steering Committee has been established to facilitate close consultation with the local Indigenous community and to advise on all elements of the study.



Analysis

Feedback will be sought on the acceptability of the program. The analysis will be:

1. The comparison of **self-reported rate** of use of appropriate child restraints and readiness to use appropriate restraints before the intervention to after the intervention and
2. **Independent observation** measuring correct use of appropriate restraints will also be compared with the parallel National Health and Medical Research Council funded *Buckle up safely* cluster randomized controlled trial concurrently conducted in West and South West Sydney.

Preliminary baseline results

Response rate: 74%

Of the 132 families with children aged three to five years attending the three early learning centres 97 responded to the baseline survey (74%). Centre directors reported having 44 Indigenous families attend their centres, of those 71% completed the survey.

Self-reported restraint use: 39% reported inappropriate use

Amongst parents who reported travelling with a child aged three, 39% reported their child had travelled using an inappropriate restraint for their child's age.

Conclusions

There is no known research in Australia that focuses on evaluating the effectiveness of interventions to increase the correct use of appropriate child restraints by Indigenous families.

Although working with small numbers in this study, the evaluation of this program will tell us valuable information about how this program is received by Indigenous families. If successful this program could increase the use of child restraints and ultimately reduce the burden of child motor vehicle injuries amongst the Australian Indigenous population.

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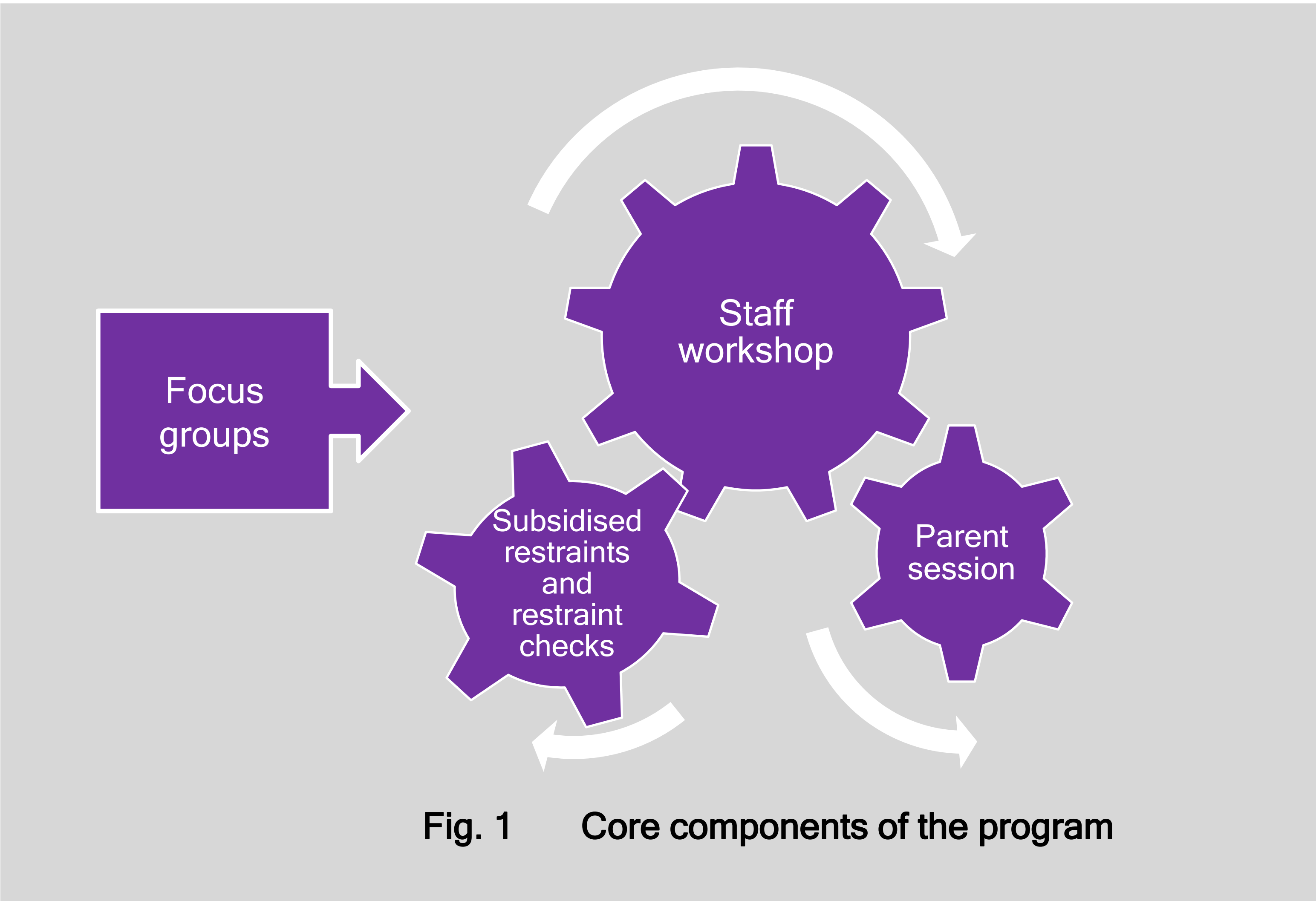


Fig. 1 Core components of the program